

the Marsupials as primitive creatures. It implies on the whole that the Marsupials have sprung from a stock with an allantoic placenta. The alternative is to assume the independent development of an allantoic placenta in both groups of the Mammalia; unless indeed the genus *Penrameles* is to be held to be the most primitive race of Marsupials living, a hypothesis which does not appear on the face of it likely. So long as it was believed that the mammary pouch of the Monotremes was the equivalent of the marsupium of the Marsupials, the persistence of this structure seemed to be a bond of union between the groups. But it is now known that the marsupium is a special organ confined to the Marsupials, an argument which is rather in favour of their being a lateral development of the mammalian stem. It is to be remarked also that the marsupium is feeblest in the Polyprotodonts, which may perhaps be looked upon as the most primitive of the Marsupials, owing to their more numerous teeth and other points to be referred to immediately.

Not only are the Marsupials interesting from the point of view of their structure ; their present and past distribution is of equal interest. During the Mesozoic epoch they occurred in Europe and North America; but not, so far as negative evidence means anything, in Australia, which is now their headquarters.

In Europe Marsupials lingered on into the Tertiary period, when they finally became extinct. In America, of course, the group has persisted to the present day. Now it is important to notice that the two main subdivisions of the Marsupials, the Polyprotodontia and the Diprotodontia, exist to-day in both Australia and South America. These two divisions, it should be explained, differ principally in that one has numerous, the other rarely more than two,¹ incisors in the lower jaw. It is perhaps the more widely distributed opinion that the Polyprotodontia are the more archaic group ; this opinion rests upon one or two facts in addition to the absence of specialisation in the incisor teeth. Among the Polyprotodontia the total number of teeth is greater—a clearly primitive character; secondly, the general

form of the body of these animals, with four subequal limbs and carnivorous or omnivorous diet, contrasts with the purely vegetarian and much specialised Kangaroos at any rate. Finally—and sufficient stress

¹ When there are more than two, *two* are especially developed. See Figs. 76, 77 (pp. 149, 150).